

1 I CLAIM:

2       1. An improved geographic database that contains data that represent a road  
3 network in a geographic region, wherein the improvement comprises:

4              wireless coverage data associated with said geographic database, wherein said  
5 wireless coverage data indicate areas within the geographic region in which navigation-  
6 related data from a service provider are available wirelessly.

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8       2. An improved geographic database that contains data that represent a road  
9 network in a geographic region, wherein the improvement comprises:

10              wireless coverage data associated with said geographic database, wherein said  
11 wireless coverage data indicate areas within the geographic region in which navigation-  
12 related data from a service provider are not available wirelessly.

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14       3. The invention of Claim 1 or 2 wherein said wireless coverage data  
15 comprises attributes associated with data records that represents geographic features  
16 located in said geographic region.

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18       4. The invention of Claim 3 wherein said geographic features are road  
19 segments.

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21       5. The invention of Claim 3 wherein said geographic features are postal  
22 codes.

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24       6. The invention of Claim 3 wherein said geographic features are  
25 administrative boundaries.

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27       7. The invention of Claim 3 wherein said geographic features are areas  
28 defined by a developer of the geographic database.

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*SW*  
*att B*

8. A method of operation for an end user's computing device that provides navigation-related services to the end user, the method comprising:

3               with the end user's computing device, establishing a wireless communications  
4 link with a remotely located navigation services provider; and  
5               obtaining wireless coverage data from said remotely located navigation services  
6 provider, wherein said wireless coverage data indicate areas in which navigation-related  
7 data from the navigation services provider are unavailable wirelessly.

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9. A method of operation for an end user's computing device that provides  
10 navigation-related services to the end user, the method comprising:

11               with the end user's computing device, establishing a wireless communications  
12 link with a remotely located navigation services provider; and  
13               obtaining wireless coverage data from said remotely located navigation services  
14 provider, wherein said wireless coverage data indicate areas in which navigation-related  
15 data from the navigation services provider are available wirelessly.

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17. The method of Claim 8 or 9 further comprising:

18               using the wireless coverage data to indicate on a display screen of said end user's  
19 computing device areas in which navigation-related data from the navigation services  
20 provider are available wirelessly.

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22. The method of Claim 10 wherein said areas in which navigation-related  
23 data from the navigation services provider are unavailable wirelessly are indicated by  
24 color coding.

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26. The method of Claim 10 wherein said areas in which navigation-related  
27 data from the navigation services provider are unavailable wirelessly are indicated by  
28 hatching.

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1           13. The method of Claim 10 wherein said areas in which navigation-related  
2        data from the navigation services provider are unavailable wirelessly are indicated by  
3        boundaries.

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5           14. The method of Claim 8 or 9 further comprising:  
6        using the wireless coverage data to indicate on a display screen of said end user's  
7        computing device areas in which navigation-related data from the navigation services  
8        provider are available wirelessly.

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10          15. The method of Claim 8 or 9 further comprising:  
11        using the wireless coverage data to provide a warning that the end user is leaving  
12        an area in which navigation-related services are available wirelessly.

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14          16. The method of Claim 15 wherein the warning is provided audibly.

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16          17. The method of Claim 15 wherein the warning is provided visually.

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18          18. The method of Claim 9 further comprising:  
19        restricting selection of destinations to those located in said areas in which  
20        navigation-related data from the navigation services provider are available wirelessly.

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22          19. The method of Claim 8 or 9 further comprising:  
23        restricting calculation of routes to limit crossing into areas in which navigation-  
24        related data from the navigation services provider are unavailable wirelessly.

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26          20. A method of operation for a computing device that provides navigation-  
27        related services to an end user, the method comprising:  
28        while the computing device is located in a first area in which navigation-related  
29        data are available wirelessly from a remotely located navigation services provider,  
30        establishing a wireless communications link with the remotely located navigation  
31        services provider; and

1        prior to leaving said first area, downloading data for a second area located outside  
2    said first area, wherein navigation-related data are not available wirelessly from the  
3    remotely located navigation services provider in said second area.

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5        21.    The method of Claim 20 further comprising:  
6              using said data in said computing device to provide navigation-related services  
7    while said computing device is located in said second area.

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9        22.    The method of Claim 20 wherein the data for the second area correspond  
10   to a destination to which the end user is traveling and which is located outside said first  
11   area.

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13       23.    The method of Claim 20 wherein the data for the second area correspond  
14   to a portion of a route on which a vehicle in which the end user is located is traveling,  
15   wherein the portion of the route is located outside the first area.

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